

# Overview of Snapshot Report on Urban Infill Development

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### **Contents**

- Project Overview
- Case Studies
- Data and Methods
- Result of analysis
- Questions / Comments

## **Project Overview**

- Ultimate Goals (Seven counties)
  - To determine how much land within the urban footprint is available for urban infill development throughout the region
  - Estimating the capacity of these parcels to accommodate population growth
- Scope of this study (Cook county)
  - Identify vacant and underutilized parcels
  - Create methodology for determining how much land is available for infill development in Cook county



## Case study: Methodologies

Level of accuracy	Data	Methodology	Example
Level 1: Low	<ul><li>Satellite imagery</li><li>Land use inventory</li></ul>	<ul> <li>Produce aggregate statistics for geographic sub-units (i.e. census tracks)</li> <li>Suitable for general estimation of land supply</li> </ul>	
Level 2: Moderate	County assessor's record	<ul> <li>Easy to identify vacant parcels</li> <li>Theoretical estimation of underutilized land using I/L ratio that involves certain assumptions and a margin of error</li> <li>Least resource intensive</li> </ul>	<ul> <li>California infill housing study</li> <li>San Francisco Bay area</li> <li>Seattle, WA</li> </ul>
Level 3: High	<ul><li>Aerial photography</li><li>Parcel vector data</li><li>County assessor's record</li></ul>	Resource intensive	<ul><li>Portland, Oregon</li><li>Maryland</li></ul>

#### **Data and Methods**

- Tax Assessor Data
  - Only available for Cook County
  - Did not use aerial photos or visit individual parcels (too time consuming)
  - Some Limitations and accuracy problems
- Improvement to Land Value Ratio

#### **Data and Methods**

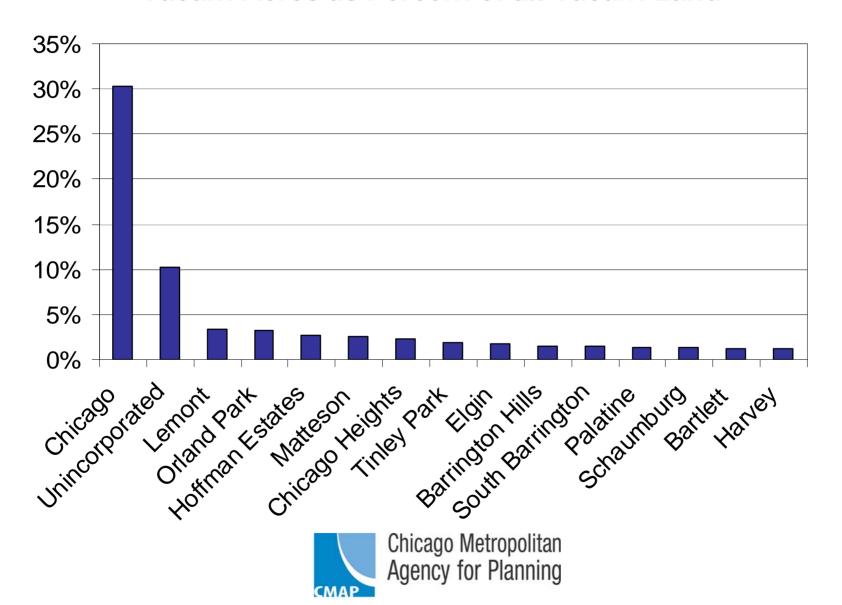
- Vacant Land:
  - Identified by the assessor data (simple count)
- Underutilized Land:
  - Used a ratio of Improvement Value over Land Value
    - Parcels with ratios below a certain cut-off point would be considered "underutilized"
    - Different cut-off points for each land use
    - Limitations
      - Bias; Method may be incompatible with the nature of the land use; Over counting

## **Cook County Parcel Inventory**

	Number of parcels		Total Acreage		Average Lot	I/L ratio
Cook	count	%	Acres	%	Size (sq ft)	(Avg)
Total	1,401,403	100%	332,766	100%	11,041	-
Vacant	95,120	6.79%	34,697	10.43%	15,887	-
Exempt	84,861	6.06%	-	-	-	-
Single Family	906,086	64.66%	164,693	49.49%	7,903	4.14
Multi Family	196,612	14.03%	31,137	9.36%	6,886	7.31
Commercial	65,573	4.68%	42,902	12.89%	28,488	2.50
Industrial	27,027	1.93%	37,489	11.27%	60,337	3.55
Mixed commercial	3,106	0.22%	503	0.15%	7,067	5.80
Others	23,018	1.64%	21,346	6.41%	51,554	6.51

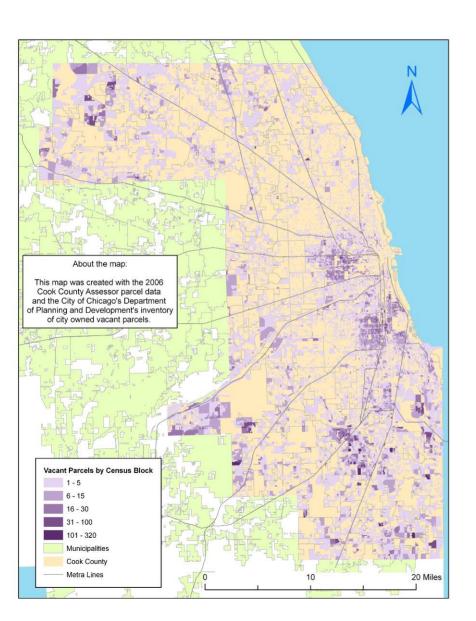


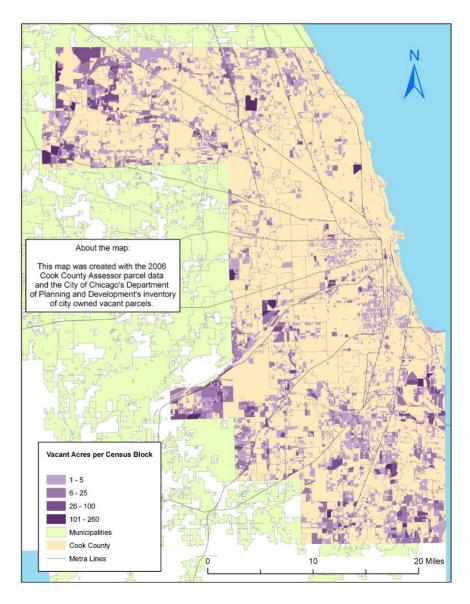
#### Vacant Acres as Percent of all Vacant Land



# **Cook County Vacant Parcels by Census Block**

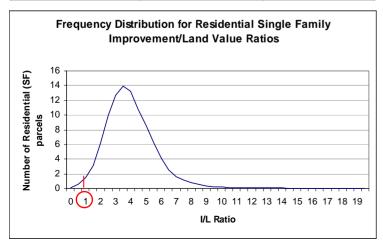
# **Cook County Vacant Acres by Census Block**

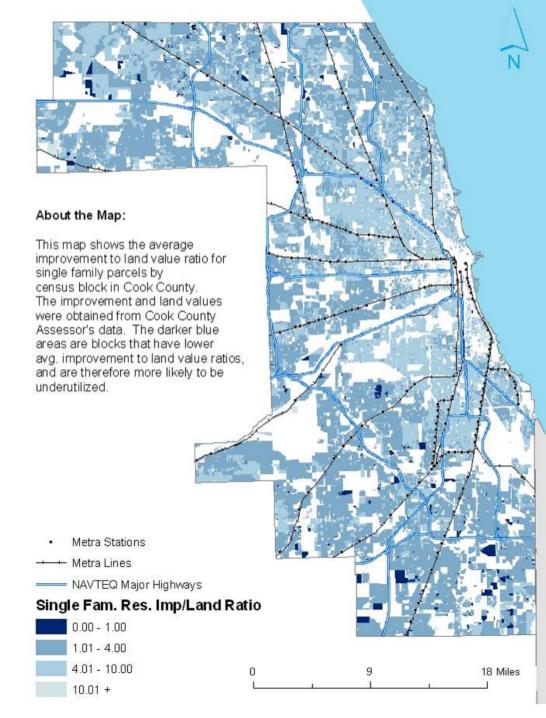




# Average Imp/Land Ratio by Census Block: Single-Family Residential

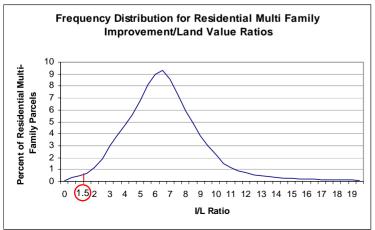
Single Family	Count	Acreage	
Total	906,086	164,693	
Total	100%	100.0%	
Doveland	894,258	155,912	
Developed	98.7%	94.7%	
Lindorutilizad	11,828	8,781	
Underutilized	1.3%	5.3%	

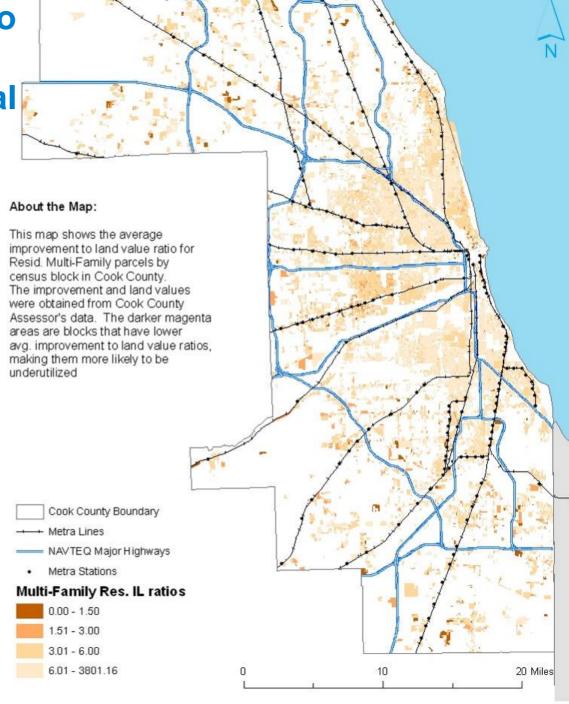




Average Imp/Land Ratio by Census Block: Multi-Family Residential

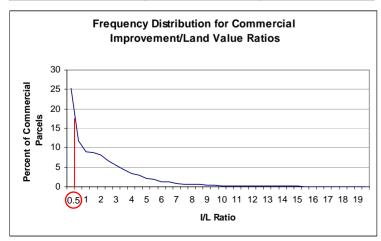
Multi-Family	Count	Acreage	
Total	196,612	31,137	
	100%	100.0%	
Doveland	194,139	29,908	
Developed	98.7%	96.1%	
Underutilized	2,473	1,229	
Underutilized	1.3%	3.9%	

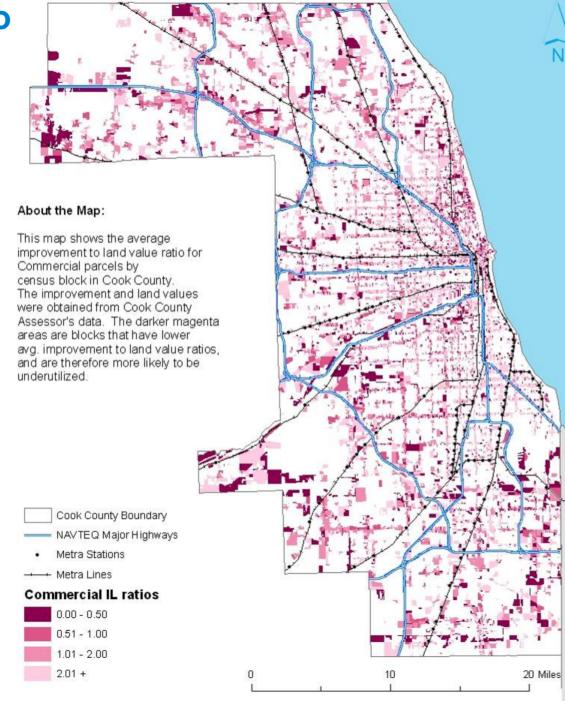




# Average Imp/Land Ratio by Census Block: Commercial

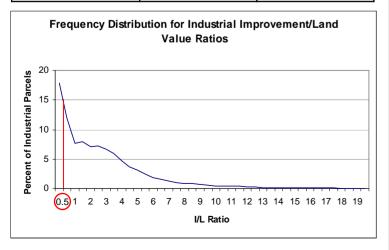
Commercial	Count	Acreage	
Total	65,573	42,902	
	100%	100.0%	
Davidanad	44,406	30,320	
Developed	67.7%	70.7%	
l lo do mutilio e d	21,167	12,582	
Underutilized	32.3%	29.3%	

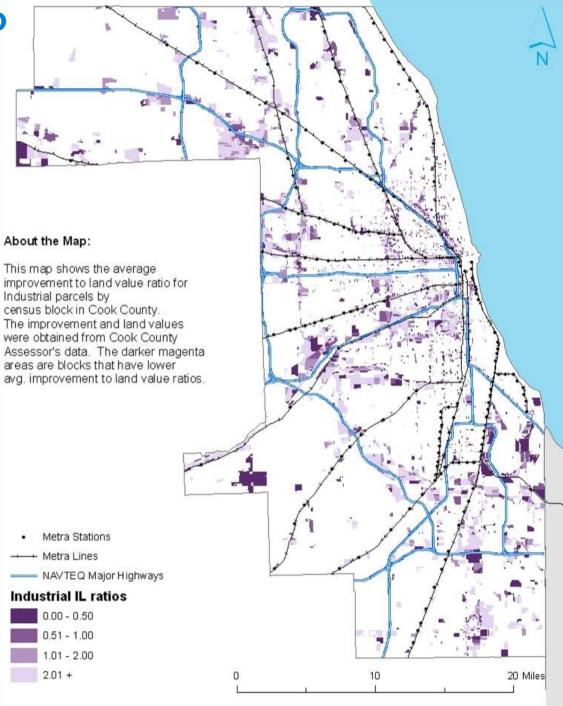




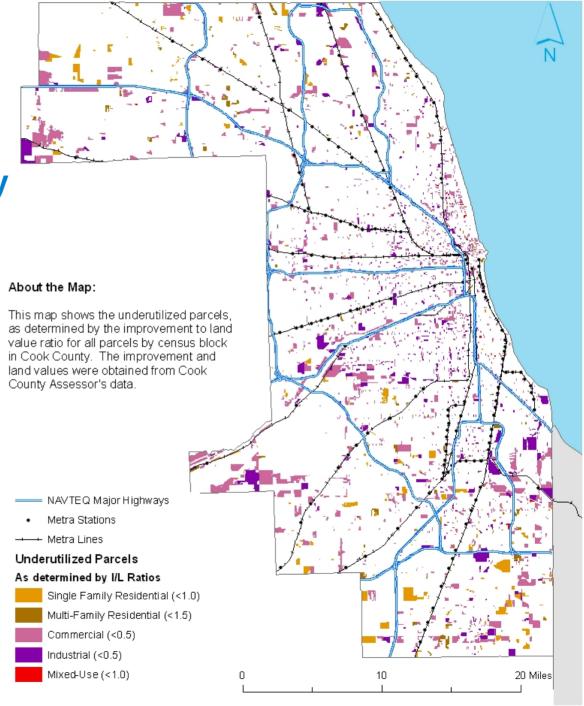
# Average Imp/Land Ratio by Census Block: Industrial

Industrial	Count	Acreage
Total	27,027	37,489
	100%	100.0%
Doveland	20,193	28,514
Developed	74.7%	76.1%
l lodow tilizod	6,834	8,975
Underutilized	25.3%	23.9%





# Cook County Census Blocks with Potentially Underutilized Parcels



### **Further research**

- Additional Infill Estimation Methods
  - Neighborhood analysis: GIS tool for statistical analysis of identified values
  - Compare improvement value to mean improvement value of determined area
- Expand to entire region
  - Need data
  - Define urban footprint: based on building density (Bay Area footprint: one unit per 1.5 acres or 6 structures per ten-acre parcel).

### **Further Research**

- Calculate the capacity of identified infill land
  - Measure need based on forecasts and projections, using different densities
- Measure the impact of different types of development in identified infill land
  - Housing, transit, jobs, etc
- Infill Development Incentives

## **Questions, Comments?**

- Ideas for further research?
- Data availability from other counties?
- Density issues how to measure, how much to "fill in," etc.
- Construction Affordability Index
  - Measure financial feasibility
- Other comments?



### Thank you!